

SEQUENCE LISTING

<110> Arena Pharmaceuticals, Inc.

<120> A Method of Identifying Modulators of Cell Surface
Membrane Receptors Useful in the Treatment of Disease

<130> 3086-4

<140> 09/060,188

<141> 1998-04-14

<160> 29

<170> PatentIn Ver. 2.1

<210> 1

<211> 25

<212> PRT

<213> Homo Sapien

<400> 1

Val	Tyr	Ala	Gly	Ile	Leu	Ser	Tyr	Arg	Val	Gly	Phe	Phe	Leu	Phe	Ile
1				5					10					15	

Leu	Val	Val	Ala	Ala	Val	Thr	Leu	Cys
			20					25

<210> 2

<211> 7

<212> PRT

<213> Homo Sapien

<400> 2

Thr	Gln	Leu	Pro	Tyr	Asp	His
1				5		

<210> 3

<211> 9

<212> PRT

<213> Homo Sapien

<400> 3

Phe	Cys	Ser	Arg	Glu	Lys	Lys	Ala	Ala
1				5				

<210> 4

<211> 54

<212> PRT

<213> Homo Sapien

<400> 4

Arg	Val	Phe	Gln	Glu	Ala	Lys	Arg	Gln	Leu	Gln	Lys	Ile	Asp	Lys	Ser
1				5					10					15	

Glu Gly Arg Phe His Val Gln Asn Leu Ser Gln Val Glu Gln Asp Gly
 20 25 30

Arg Thr Gly His Gly Leu Arg Arg Ser Ser Lys Phe Cys Ser Arg Glu
 35 40 45

Lys Lys Ala Ala Lys Thr
 50

<210> 5
 <211> 10
 <212> PRT
 <213> Homo Sapien

<220>
 <223> Xaa is an amino acid other than Ala. Most preferably, Xaa is Glu.

<400> 5
 Ser Arg Glu Lys Lys Ala Xaa Lys Thr Leu
 1 5 10

<210> 6
 <211> 72
 <212> PRT
 <213> Homo Sapien

<220>
 <223> Xaa is an amino acid other than Ala. Most preferably, Xaa is Glu.

<400> 6
 Arg Val Tyr Ile Val Ala Lys Arg Thr Thr Lys Asn Leu Glu Ala Gly
 1 5 10 15

Val Met Lys Glu Met Ser Asn Ser Lys Glu Leu Thr Leu Arg Ile His
 20 25 30

Ser Lys Asn Phe His Glu Asp Thr Leu Ser Ser Thr Lys Ala Lys Gly
 35 40 45

His Asn Pro Arg Ser Ser Ile Ala Val Lys Leu Phe Lys Phe Ser Arg
 50 55 60

Glu Lys Lys Ala Xaa Lys Thr Leu
 65 70

<210> 7
 <211> 22
 <212> PRT
 <213> Homo Sapien

<400> 7

Cys Leu Asp Gly Leu Thr Thr Cys Gly Val Val Tyr Pro Leu Ser Lys
 1 5 10 15

Asn His Leu Val Val Leu
 20

<210> 8
 <211> 29
 <212> PRT
 <213> Homo Sapien

<400> 8
 Cys Arg Ile Val Cys Arg His Ala Gln Gln Ile Ala Leu Gln Arg His
 1 5 10 15

Leu Leu Pro Ala Ser His Tyr Val Ala Thr Arg Lys Gly
 20 25

<210> 9
 <211> 21
 <212> PRT
 <213> Homo Sapien

<400> 9
 Tyr Ile Thr Val Arg Asn Pro Gln Tyr Asn Pro Gly Asp Lys Gly Thr
 1 5 10 15

Lys Ile Ile Lys Arg
 20

<210> 10
 <211> 21
 <212> PRT
 <213> Homo Sapien

<400> 10
 Tyr Ile Thr Val Arg Asn Pro Gln Tyr Asn Pro Gly Asp Lys Cys Thr
 1 5 10 15

Lys Ile Ile Lys Arg
 20

<210> 11
 <211> 4
 <212> PRT
 <213> Homo Sapien

<400> 11
 Val Thr Ile Leu
 1

<210> 12

<211> 9
 <212> PRT
 <213> Homo Sapien

<400> 12
 Ala Leu Ile Thr Arg Thr Val Lys Lys
 1 5

<210> 13
 <211> 24
 <212> PRT
 <213> Homo Sapien

<400> 13
 Asn Thr Ala Gly Phe Phe Thr Val Phe Ala Ser Glu Leu Ser Ala Tyr
 1 5 10 15

Thr Leu Thr Val Ile Thr Leu Glu
 20

<210> 14
 <211> 24
 <212> PRT
 <213> Homo Sapien

<400> 14
 Ile Leu Leu Val Leu Phe Tyr Pro Leu Asn Ser Tyr Ala Asn Pro Phe
 1 5 10 15

Leu Tyr Ala Ile Phe Thr Lys Ala
 20

<210> 15
 <211> 3
 <212> PRT
 <213> Homo Sapien

<220>
 <223> Xaa is normally either Glu or Asp.

<400> 15
 Xaa Arg Tyr
 1

<210> 16
 <211> 5
 <212> PRT
 <213> Homo Sapien

<400> 16
 Glu Lys Lys Ala Ala
 1 5

<210> 17
 <211> 5
 <212> PRT
 <213> Homo Sapien

<220>
 <223> First Xaa can be any amino acid, preferably Gly,
 Ala, or Lys.

<220>
 <223> Second and third Xaa denote a basic amino acid.

<220>
 <223> Fourth Xaa denotes a hydrophobic amino acid.

<220>
 <223> Fifth Xaa denotes any amino acid, preferably Lys,
 Arg, Glu, or a hydrophobic amino acid with a
 differing side chain to the original hydrophobic
 amino acid in that position.

<400> 17
 Xaa Xaa Xaa Xaa Xaa
 1 5

<210> 18
 <211> 24
 <212> PRT
 <213> Homo Sapien

<220>
 <223> Xaa is Glu, Asp, Gln, His or Lys.

<400> 18
 Val Tyr Ala Gly Ile Leu Ser Tyr Xaa Gly Phe Phe Leu Phe Ile Leu
 1 5 10 15

Val Val Ala Ala Val Thr Leu Cys
 20

<210> 19
 <211> 25
 <212> PRT
 <213> Homo Sapien

<400> 19
 Val Thr Phe Ile Ile Ala Thr Val Glu Gly Val Leu Leu Phe Leu Ile
 1 5 10 15

Leu Val Val Val Val Gly Ile Leu Ile
 20 25

<210> 20

<211> 4
<212> PRT
<213> Homo Sapien

<400> 20
Gln Leu Pro Tyr
1

<210> 21
<211> 20
<212> DNA
<213> Homo Sapien

<400> 21
ctggtcctgc actttgctgc 20

<210> 22
<211> 23
<212> DNA
<213> Homo Sapien

<400> 22
agcatcacat aggtccgtgt cac 23

<210> 23
<211> 24
<212> DNA
<213> Homo Sapien

<400> 23
accagaaagg gtgtgggtac actg 24

<210> 24
<211> 19
<212> DNA
<213> Homo Sapien

<400> 24
ggaacgaaag gcactttgg 19

<210> 25
<211> 20
<212> DNA
<213> Homo Sapien

<400> 25
gctgcctcgg gattatttag 20

<210> 26
<211> 23
<212> DNA

<213> Homo Sapien

<400> 26

gcctattagc aggaacatgg gtg

23

<210> 27

<211> 330

<212> PRT

<213> Homo Sapien

<400> 27

Met Met Trp Gly Ala Gly Ser Pro Leu Ala Trp Leu Ser Ala Gly Ser
1 5 10 15

Gly Asn Val Asn Val Ser Ser Val Gly Pro Ala Glu Gly Pro Thr Gly
20 25 30

Pro Ala Ala Pro Leu Pro Ser Pro Lys Ala Trp Asp Val Val Leu Cys
35 40 45

Ile Ser Gly Thr Leu Val Ser Cys Glu Asn Ala Leu Val Val Ala Ile
50 55 60

Ile Val Gly Thr Pro Ala Phe Arg Ala Pro Met Phe Leu Leu Val Gly
65 70 75 80

Ser Leu Ala Val Ala Asp Leu Leu Ala Gly Leu Gly Leu Val Leu His
85 90 95

Phe Ala Ala Val Phe Cys Ile Gly Ser Ala Glu Met Ser Leu Val Leu
100 105 110

Val Gly Val Leu Ala Met Ala Phe Thr Ala Ser Ile Gly Ser Leu Leu
115 120 125

Ala Ile Thr Val Asp Arg Tyr Leu Ser Leu Tyr Asn Ala Leu Thr Tyr
130 135 140

Tyr Ser Glu Thr Thr Val Thr Arg Thr Tyr Val Met Leu Ala Leu Val
145 150 155 160

Trp Gly Gly Ala Leu Gly Leu Gly Leu Leu Pro Val Leu Ala Trp Asn
165 170 175

Cys Leu Asp Gly Leu Thr Thr Cys Gly Val Val Tyr Pro Leu Ser Lys
180 185 190

Asn His Leu Val Val Leu Ala Ile Ala Phe Phe Met Val Phe Gly Ile
195 200 205

Met Leu Gln Leu Tyr Ala Gln Ile Cys Arg Ile Val Cys Arg His Ala
210 215 220

Gln Gln Ile Ala Leu Gln Arg His Leu Leu Pro Ala Ser His Tyr Val
225 230 235 240

Ala Thr Arg Lys Gly Ile Ala Thr Leu Ala Val Val Leu Gly Ala Phe
245 250 255

Ala Ala Cys Trp Leu Pro Phe Thr Val Tyr Cys Leu Leu Gly Asp Ala
260 265 270

His Ser Pro Pro Leu Tyr Thr Tyr Leu Thr Leu Leu Pro Ala Thr Tyr
275 280 285

Asn Ser Met Ile Asn Pro Ile Ile Tyr Ala Phe Arg Asn Gln Asp Val
290 295 300

Gln Lys Val Leu Trp Ala Val Cys Cys Cys Cys Ser Ser Ser Lys Ile
305 310 315 320

Pro Phe Arg Ser Arg Ser Pro Ser Asp Val
325 330

<210> 28
<211> 362
<212> PRT
<213> Homo Sapien

<400> 28
Met Asn Ala Ser Ala Ala Ser Leu Asn Asp Ser Gln Val Val Val Val
1 5 10 15

Ala Ala Glu Gly Ala Ala Ala Ala Thr Ala Ala Gly Gly Pro Asp
20 25 30

Thr Gly Glu Trp Gly Pro Pro Ala Ala Ala Ala Leu Gly Ala Gly Gly
35 40 45

Gly Ala Asn Gly Ser Leu Glu Leu Ser Ser Gln Leu Ser Ala Gly Pro
50 55 60

Pro Gly Leu Leu Leu Pro Ala Val Asn Pro Trp Asp Val Leu Leu Cys
65 70 75 80

Val Ser Gly Thr Val Ile Ala Gly Glu Asn Ala Leu Val Val Ala Leu
85 90 95

Ile Ala Ser Thr Pro Ala Leu Arg Thr Pro Met Phe Val Leu Val Gly
100 105 110

Ser Leu Ala Thr Ala Asp Leu Leu Ala Gly Cys Gly Leu Ile Leu His
115 120 125

Phe Val Phe Gln Tyr Leu Val Pro Ser Glu Thr Val Ser Leu Leu Thr
130 135 140

Val Gly Phe Leu Val Ala Ser Phe Ala Ala Ser Val Ser Ser Leu Leu
145 150 155 160

Ala Ile Thr Val Asp Arg Tyr Leu Ser Leu Tyr Asn Ala Leu Thr Tyr
165 170 175

Tyr Ser Arg	Arg Thr Leu Leu Gly	Val His Leu Leu Leu	Ala Ala Thr
	180	185	190
Trp Thr Val	Ser Leu Gly Leu Gly	Leu Leu Pro Val	Leu Gly Trp Asn
	195	200	205
Cys Leu Ala	Glu Arg Ala Ala Cys	Ser Val Val Arg	Pro Leu Ala Arg
	210	215	220
Ser His Val	Ala Leu Leu Ser Ala	Ala Phe Phe Met	Val Phe Gly Ile
	225	230	235
Met Leu His	Leu Tyr Val Arg Ile	Cys Gln Val Val	Trp Arg His Ala
	245	250	255
His Gln Ile	Ala Leu Gln Gln His	Cys Leu Ala Pro	Pro His Leu Ala
	260	265	270
Ala Thr Arg	Lys Gly Val Gly Thr	Leu Ala Val Val	Leu Gly Thr Phe
	275	280	285
Gly Ala Ser	Trp Leu Pro Phe Ala	Ile Tyr Cys Val	Val Gly Ser His
	290	295	300
Glu Asp Pro	Ala Val Tyr Thr Tyr	Ala Thr Leu Leu	Pro Ala Thr Tyr
	305	310	315
Asn Ser Met	Ile Asn Pro Ile Ile	Tyr Ala Phe Arg	Asn Gln Glu Ile
	325	330	335
Gln Arg Ala	Leu Trp Leu Leu Leu	Cys Gly Cys Phe	Gln Ser Lys Val
	340	345	350
Pro Phe Arg	Ser Arg Ser Pro Ser	Glu Val	
	355	360	

<210> 29
 <211> 334
 <212> PRT
 <213> Homo Sapien

<400> 29

Met Asn Glu	Asp Leu Lys Val	Asn Leu Ser Gly	Leu Pro Arg Asp Tyr
1	5	10	15
Leu Asp Ala	Ala Ala Ala Glu	Asn Ile Ser	Ala Ala Val Ser Ser Arg
	20	25	30
Val Pro Ala	Val Glu Pro Glu	Pro Glu Leu	Val Val Asn Pro Trp Asp
	35	40	45
Ile Val Leu	Cys Thr Ser Gly	Thr Leu Ile Ser	Cys Glu Asn Ala Ile
	50	55	60
Val Val Leu	Ile Ile Phe His	Asn Pro Ser Leu	Arg Ala Pro Met Phe

65	70	75	80
Leu Leu Ile Gly Ser Leu Ala Leu Ala Asp Leu Leu Ala Gly Ile Gly	85	90	95
Leu Ile Thr Asn Phe Val Phe Ala Tyr Leu Leu Gln Ser Glu Ala Thr	100	105	110
Lys Leu Val Thr Ile Gly Leu Ile Val Ala Ser Phe Ser Ala Ser Val	115	120	125
Cys Ser Leu Leu Ala Ile Thr Val Asp Arg Tyr Leu Ser Leu Tyr Tyr	130	135	140
Ala Leu Thr Tyr His Ser Glu Arg Thr Val Thr Phe Thr Tyr Val Met	145	150	155
Leu Val Met Leu Trp Gly Thr Ser Ile Cys Leu Gly Leu Leu Pro Val	165	170	175
Met Gly Trp Asn Cys Leu Arg Asp Glu Ser Thr Cys Ser Val Val Arg	180	185	190
Pro Leu Thr Lys Asn Asn Ala Ala Ile Leu Ser Val Ser Phe Leu Phe	195	200	205
Met Phe Ala Leu Met Leu Gln Leu Tyr Ile Gln Ile Cys Lys Ile Val	210	215	220
Met Arg His Ala His Gln Ile Ala Leu Gln His His Phe Leu Ala Thr	225	230	235
Ser His Tyr Val Thr Thr Arg Lys Gly Val Ser Thr Leu Ala Ile Ile	245	250	255
Leu Gly Thr Phe Ala Ala Cys Trp Met Pro Phe Thr Leu Tyr Ser Leu	260	265	270
Ile Ala Asp Tyr Thr Tyr Pro Ser Ile Tyr Thr Tyr Ala Thr Leu Leu	275	280	285
Pro Ala Thr Tyr Asn Ser Ile Ile Asn Pro Val Ile Tyr Ala Phe Arg	290	295	300
Asn Gln Glu Ile Gln Lys Ala Leu Cys Leu Ile Cys Cys Gly Cys Ile	305	310	315
Pro Ser Ser Leu Ala Gln Arg Ala Arg Ser Pro Ser Asp Val	325	330	